

**ABSTRACT OF THE INVENTION**

Modifying TNF with polyethyleneglycol (PEG) having an approximate weight average molecular weight in the range of about 10,000 to about 40,000, preferably in the range of about 20,000 to 30,000, significantly increases the circulating half-life of the TNF while not increasing its toxicity. As a result, lower doses of the TNF may be administered to effectively treat tumors with fewer, accompanying adverse side effects to the patient.

005120 0021030